

Introduced by Senator Pavley
(Coauthors: Senators Allen and De León)
(Coauthor: Assembly Member Wilk)

January 20, 2016

An act to add Chapter 6 (commencing with Section 42710) to Part 4 of Division 26 of the Health and Safety Code, and to amend Section 3236.5 of, and to add Sections 3133, 3134, 3135, 3136, 3137, 3138, 3139, 3140, 3141, 3142, 3143, and 3144 to, the Public Resources Code, relating to natural gas.

LEGISLATIVE COUNSEL'S DIGEST

SB 887, as introduced, Pavley. Natural gas storage wells.

Under existing law, the Division of Oil, Gas, and Geothermal Resources in the Department of Conservation regulates the drilling, operation, maintenance, and abandonment of oil and gas wells in the state. Existing law provides that a person who fails to comply with specific laws relating to the regulation of oil or gas operations is guilty of a misdemeanor.

This bill would require, before January 1, 2018, and annually thereafter, the division to inspect all natural gas storage wells serving or located in a natural gas storage facility and would prescribe standards for a natural gas storage well. This bill would require a natural gas storage well in existence on December 31, 2016, to be brought into compliance with the provisions of this bill by an unspecified date and the use of wells older than an unspecified age to be phased out by an unspecified date. This bill would prohibit the division from issuing a permit for a new natural gas storage well located within an unspecified distance of a sensitive receptor, as defined, and would require the division to order operators to cease the use of, and plug and abandon,

an existing natural gas storage well that is within an unspecified distance of a sensitive receptor by an unspecified date. This bill would require, in the event of a loss of the integrity of a natural gas storage well, well casing, or cementing resulting in a significant, uncontrolled leak of natural gas, that preparations for the drilling of a relief well begin within 24 hours of the discovery of the leak. This bill would require the operator, in the event of a leak of any size from a natural gas storage well, to notify the division immediately and would require the division to post information about the leak on its Internet Web site, as prescribed. This bill would require the division to convene an independent panel of recognized experts to develop best practices for natural gas storage facilities and to review and incorporate the best practices developed by the panel into its regulations for natural gas storage wells, as appropriate, and for other wells under the division's jurisdiction, as applicable. This bill would require the division, in consultation with the Office of Environmental Health Hazard Assessment, the State Department of Public Health, and the Department of Industrial Relations, to perform a risk assessment of natural gas storage wells and to report the findings of the risk assessment to the Legislature. This bill would require the State Air Resources Board, in consultation with any local air district and the division, to develop guidelines for a monitoring program that includes continuous monitoring of the ambient concentration of natural gas at sufficient locations throughout a natural gas storage facility or planned natural gas storage facility to identify natural gas leaks. This bill would require all materials provided to the division to comply with these provisions to be posted and available to the public on its Internet Web site. Because a violation of these requirements would be a crime, the bill would impose a state-mandated local program.

Existing law requires the operator of a well to file a written notice of intention to commence drilling with, and prohibits any drilling until approval is given by, the supervisor or district deputy. Under existing law, the notice is deemed approved if the supervisor or district deputy fails to respond to the notice in writing within 10 working days from receipt and is deemed canceled if operations have not commenced within one year of receipt. Existing law provides that these provisions also apply to the deepening or redrilling of the well, any operation involving the plugging of the well, or any operations permanently altering in any manner the casing of the well.

This bill would require certain materials, relating to wells serving or located in a natural gas storage facility, to be submitted by the operator

and approved at the supervisor's discretion before approval of the notice. This bill would provide that the public has a right to review the location of all new natural gas storage wells or existing wells converting to a natural gas storage well before the approval of the notice.

Existing law requires the owner or operator of any well to keep, or cause to be kept, a careful and accurate log, core record, and history of the drilling of the well.

This bill would require the well history to include all operations, injection, production, and emplacement of any materials into a natural gas storage well, and to be disclosed to the division by the operator, as specified.

Under existing law, a person who violates certain statutes or regulations relating to oil and gas well operations is subject to a civil penalty not to exceed \$25,000 for each violation. Existing law provides that the unreasonable waste of natural gas by act, omission, sufferance, or insistence is opposed to the public interest and is unlawful.

This bill would provide that a violation of the prohibition against the unreasonable waste of natural gas is subject to the civil penalty not to exceed \$25,000 for each violation.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: yes.

The people of the State of California do enact as follows:

- 1 SECTION 1. The Legislature finds and declares as follows:
- 2 (a) Public transparency regarding regulations and regulatory
- 3 activity to protect public health and welfare and natural resources
- 4 is essential.
- 5 (b) On October 23, 2015, a significant, uncontrolled leak from
- 6 a natural gas storage well that was originally drilled over 60 years
- 7 ago was discovered in the Aliso Canyon natural gas storage facility
- 8 located in the County of Los Angeles. Initial efforts to stop the
- 9 leak failed.
- 10 (c) The Division of Oil, Gas, and Geothermal Resources in the
- 11 Department of Conservation responded swiftly to the leak,

1 including by issuing two orders that, among other things, require
2 the use of relief wells. The division has been working around the
3 clock overseeing efforts to stop the leak.

4 (d) It was several days before the community was notified of
5 the leak, although numerous residents started reporting odor
6 concerns almost immediately. The leaking well is up the hill and
7 approximately one and one-quarter miles away from the nearest
8 home. Other natural gas storage wells serving this facility are
9 located closer to homes.

10 (e) The Governor declared a state of emergency on January 6,
11 2016, in order to facilitate the ongoing state response and efforts
12 to stop the leak.

13 (f) The standards for natural gas storage wells need to be
14 improved in order to reflect 21st century technology, recognize
15 that these facilities may be in locations near population centers,
16 and ensure a disaster like the Aliso Canyon leak does not happen
17 again.

18 SEC. 2. Chapter 6 (commencing with Section 42710) is added
19 to Part 4 of Division 26 of the Health and Safety Code, to read:

20
21 CHAPTER 6. NATURAL GAS STORAGE FACILITY MONITORING
22

23 42710. (a) The state board, in consultation with any local air
24 district and the Division of Oil, Gas, and Geothermal Resources
25 in the Department of Conservation, shall develop a natural gas
26 storage facility monitoring program that includes continuous
27 monitoring of the ambient concentration of natural gas at sufficient
28 locations throughout a natural gas storage facility or planned
29 natural gas storage facility to identify natural gas leaks.

30 (b) The program shall include guidelines for the continuous
31 monitoring which shall include, at minimum, spectral visual
32 imaging and quantitative chemical analytical monitoring.

33 (c) All materials provided to comply with this section shall be
34 posted and available to the public on the Internet Web site of the
35 Division of Oil, Gas, and Geothermal Resources.

36 SEC. 3. Section 3133 is added to the Public Resources Code,
37 to read:

38 3133. (a) As used in this article, “natural gas storage well”
39 means an active or idle natural gas storage well serving or located
40 in a natural gas storage facility.

1 (b) Before January 1, 2018, and annually thereafter, the division
2 shall inspect all natural gas storage wells.

3 (c) A natural gas storage well in existence on December 31,
4 2016, shall be brought into compliance with this article by ____.
5 The use of a natural gas storage well older than ____ shall be
6 phased out by ____.

7 SEC. 4. Section 3134 is added to the Public Resources Code,
8 to read:

9 3134. A natural gas storage well shall meet all of the following
10 standards:

11 (a) The well shall have an automatic downhole shutoff system,
12 including, but not limited to, subsurface safety valves, deployed
13 in order to limit leaks associated with a loss of the integrity of a
14 well, well casing, or cementing. The shutoff system shall be tested
15 and the results of the test shall be reported to the division no less
16 than annually.

17 (b) Proactive evaluation of the integrity of the well, well casing,
18 or cementing across the entire length of the well shall be conducted
19 in order to quantitatively assess the risks posed by erosion,
20 corrosion, aging, scaling, cracking, and any other process that may
21 produce natural gas leaks. This evaluation shall include visual
22 imaging along the entire length of the well. A natural gas storage
23 well shall be evaluated pursuant to the measures in this subdivision
24 at least annually if the well was originally drilled more than 20
25 years ago.

26 (c) Natural gas injection and production shall be through tubing
27 only and isolated from contact with the well casing.

28 (d) Annular pressure and production or injection flow rate shall
29 be continuously monitored.

30 SEC. 5. Section 3135 is added to the Public Resources Code,
31 to read:

32 3135. (a) For the purposes of this section, “sensitive receptor”
33 includes, but is not limited to, a school, hospital, and residential
34 housing.

35 (b) In addition to the requirements of Section 3134, a natural
36 gas storage well that is within 10,000 feet of a sensitive receptor
37 shall meet both of the following requirements:

38 (1) Have continuous air quality monitoring for natural gas leaks
39 at the wellhead.

(2) Be evaluated pursuant to the measures in subdivision (b) of Section 3134 at least annually.

(c) The division shall not issue a permit for a new natural gas storage well located within ____ feet of a sensitive receptor, and the division shall order operators to cease the use of, and plug and abandon, an existing natural gas storage well within _____ feet of a sensitive receptor by ____.

SEC. 6. Section 3136 is added to the Public Resources Code, to read:

3136. (a) The operator of a natural gas storage well shall submit for the supervisor's approval the following materials:

(1) A regular maintenance program for the well and the portion of the facility within the division's jurisdiction.

(2) Operating conditions and parameters for the well and the portion of the facility within the division's jurisdiction.

(3) A monitoring program for the well and the portion of the facility within the division's jurisdiction that includes air quality monitoring pursuant to Chapter 6 (commencing with Section 42710) of Part 4 of Division 26 of the Health and Safety Code. Air quality monitoring sufficient to include a new or reworked well shall be in operation before a new well is drilled or reworked.

(4) A natural gas leak prevention and response program that addresses the full range of natural gas leaks possible at the facility with specific response plans that provide for immediate control of the leak. The prevention and response program shall include, but is not limited to, all of the following:

(A) A protocol for public notice of the leak to the community by the operator.

(B) Prepositioning and identification of materials and personnel necessary to respond to leaks. This shall include materials, including equipment to capture leaked gas, to respond to the leak itself as well as to protect public health.

(C) A training program to ensure site personnel are prepared to respond to a leak.

(b) All of the materials described in subdivision (a) shall be approved by the supervisor, at his or her discretion, and in the possession of the division before the supervisor or district deputy approves a notice required pursuant to Section 3203.

(c) All of the materials described in subdivision (a) shall be reported to the division annually. The operator shall not deviate

1 from the programs and other conditions and protocols contained
2 in the materials without prior written approval by the supervisor.

3 SEC. 7. Section 3137 is added to the Public Resources Code,
4 to read:

5 3137. The public has a right to review the location of a natural
6 gas storage well or conversion of an existing well to a natural gas
7 storage well before the approval of any notice required pursuant
8 to Section 3203.

9 SEC. 8. Section 3138 is added to the Public Resources Code,
10 to read:

11 3138. In the event of a loss of the integrity of a natural gas
12 storage well, well casing, or cementing resulting in a significant,
13 uncontrolled leak of natural gas, preparations for the drilling of a
14 relief well shall begin within 24 hours of the discovery of the leak
15 regardless of any other activities undertaken to stop the leak.

16 SEC. 9. Section 3139 is added to the Public Resources Code,
17 to read:

18 3139. In the event of a leak of any size from a natural gas
19 storage well, the operator shall notify the division immediately.
20 Within 24 hours of notification, the division shall post information
21 about the leak on its Internet Web site and provide regular updates
22 to the public until the leak is stopped.

23 SEC. 10. Section 3140 is added to the Public Resources Code,
24 to read:

25 3140. (a) The division shall convene an independent panel of
26 recognized experts to develop best practices for natural gas storage
27 facilities. The panel shall consider at least of all the following:

28 (1) The proximity of a natural gas storage facility and wells to
29 population.

30 (2) The age when a well should be plugged and abandoned, and
31 what standards the plugging and abandonment should meet.

32 (3) The range of proactive methods to assess the integrity of a
33 well, well casing, and cementing.

34 (4) A thorough analysis of the risks associated with the
35 conversion of a well for use as a natural gas storage well.

36 (5) Natural gas storage well operating, maintenance, and
37 monitoring standards.

38 (b) Upon completion of the panel's work pursuant to subdivision
39 (a), the division shall review and incorporate best practices
40 developed by the panel into its regulations for natural gas storage

1 wells, as appropriate, and for other wells under the division's
2 jurisdiction, as applicable.

3 SEC. 11. Section 3141 is added to the Public Resources Code,
4 to read:

5 3141. (a) The division, in consultation with the Office of
6 Environmental Health Hazard Assessment, the State Department
7 of Public Health, and the Department of Industrial Relations, shall
8 perform a risk assessment of natural gas storage wells. The risk
9 assessment shall include, but is not limited to, all of the following
10 information:

11 (1) The age of a well.

12 (2) The service history and operating conditions of the well.

13 (3) The potential impact of a leak on public, occupational, and
14 environmental health.

15 (b) The risk assessment shall be subjected to peer review by
16 independent experts.

17 (c) The findings of the risk assessment shall be reported to the
18 Legislature in accordance with Section 9795 of the Government
19 Code.

20 SEC. 12. Section 3142 is added to the Public Resources Code,
21 to read:

22 3142. To ensure that the division has all the records it needs
23 to evaluate natural gas storage wells, the well history maintained
24 pursuant to Section 3213 shall include all operations, injection,
25 production, and emplacement of any materials into the well. The
26 operator shall disclose the well history to the division for each
27 operation, injection, production, and emplacement of any material
28 into the well.

29 SEC. 13. Section 3143 is added to the Public Resources Code,
30 to read:

31 3143. All materials provided to the division to comply with
32 Section 3133 to 3142, inclusive, shall be posted and available to
33 the public on the Internet Web site of the division.

34 SEC. 14. Section 3144 is added to the Public Resources Code,
35 to read:

36 3144. A member of the public may bring suit for writ of
37 mandate against the division for failure to enforce Sections 3133
38 to 3143, inclusive.

39 SEC. 15. Section 3236.5 of the Public Resources Code is
40 amended to read:

3236.5. (a) A person who violates this chapter or a regulation implementing this chapter is subject to a civil penalty not to exceed twenty-five thousand dollars (\$25,000) for each violation. A person who commits a violation of Article 3 (commencing with Section 3150) or Section 3300 is subject to a civil penalty of not less than ten thousand dollars (\$10,000) and not to exceed twenty-five thousand dollars (\$25,000) per day per violation. An act of God and an act of vandalism beyond the reasonable control of the operator shall not be considered a violation. The civil penalty shall be imposed by an order of the supervisor pursuant to Section 3225 upon a determination that a violation has been committed by the person charged. The imposition of a civil penalty under this section shall be in addition to any other penalty provided by law for the violation. When establishing the amount of the civil penalty pursuant to this section, the supervisor shall consider, in addition to other relevant circumstances, all of the following:

- (1) The extent of harm caused by the violation.
- (2) The persistence of the violation.
- (3) The pervasiveness of the violation.
- (4) The number of prior violations by the same violator.

(b) An order of the supervisor imposing a civil penalty shall be reviewable pursuant to Article 6 (commencing with Section 3350). When the order of the supervisor has become final and the penalty has not been paid, the supervisor may apply to the appropriate superior court for an order directing payment of the civil penalty. The supervisor may also seek from the court an order directing that production from the well or use of the production facility that is the subject of the civil penalty order be discontinued until the violation has been remedied to the satisfaction of the supervisor and the civil penalty has been paid.

(c) Any amount collected under this section shall be deposited in the Oil, Gas, and Geothermal Administrative Fund.

SEC. 16. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within

- 1 the meaning of Section 6 of Article XIII B of the California
- 2 Constitution.

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